

ABSTRACT OF THE DISCLOSURE

A substrate holding part in a substrate processing apparatus includes a fixing table having a suction pipe and a supply pipe, and a holding member having atmosphere
5 flow passages for vacuum-holding a substrate. The holding member is placed on the fixing table. The suction pipe is connected through a pipe to a compressor, and the supply pipe is connected through a pipe and a solenoid valve to a gas supply part. When the substrate holding part holds a substrate, the compressor sucks an atmosphere through the suction pipe to cause the holding member to vacuum-hold the substrate. When the
10 substrate holding part releases the substrate, a gas is supplied from the gas supply part through the supply pipe by opening the solenoid valve while the suction through the suction pipe continues. The substrate holding device and the substrate processing apparatus suppress the deposition of particles on the substrate.